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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/764,510 | 01/18/2001 | Mooi Choo Chuah | 54 | 6393 |
| 22046 | 7590 | 12/08/2004 | EXAMINER | |
| LUCENT TECHNOLOGIES INC. DOCKET ADMINISTRATOR 101 CRAWFORDS CORNER ROAD - ROOM 3J-219 HOLMDEL, NJ 07733 | | | NGUYEN, HANH N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2662 | |

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,510

Applicant(s)

CHUAH, MOOI CHOO

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 7/19/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: the serial number of related application on page 1, lines 7, 8 is missing and needs to be filled.

Appropriate correction is required.

Claim Objections

Claim 6 is objected to because of the following informalities: is “a packet server” on line 2 referred to “a first packet server” on line 1 ?. Appropriate correction is required.

Claims 7-9 are objected because they depend on claim 6 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 15 are rejected under 35 USC 103(a) as being unpatentable over Kannas et al. (US pat. No. 6,683,853 B1) in view of Puuskari (Pat. 6,728,208 B1).

In claims 1, 2, 3, 4, 6, 7, 8 and 15, Kannas et al. discloses a user equipment 10 (a mobile station, fig.1) requests at step 52 (fig.2) for a desired QOS resource to a serving support node SGSN 20 (a second packet server) via a radio network controller RNC18 (a first packet

server). If the requested QOS resource (step 54, Fig.2) is not available, lower quality of service resource (at step 56, fig.2) is assigned. When a higher quality of service (at step 62, fig.2) is available, the request for higher QOS is upgraded (at step 68, fig.2) (performing variable QOS negotiations including downgradable QOS and upgradable QOS with the wireless data). See col.5, lines 40 to col.6, line 4. Kannas et al. does not disclose QOS negotiation including an indication for requesting multiple traffic class preferences in a priority order.

Puuskari discloses a mobile station (MS, Fig.1) notifies its presence to the GPRS network 13 (wireless data network) (attaching the mobile station to a wireless data network, See col.7, lines 48-58). Dynamic QOS information is performed by associating priority information and traffic type information in data packet. The priority information has two values (QOS class field) defines the orders (indications for priority order). The traffic type information has two traffic types (multiple traffic class preferences). See col.10, lines 10-40 & & col.12, lines 35-60 & col.17, lines 9-15. Therefore, it would have been obvious to one ordinary skill in the art to apply the priority information indicating priority order and traffic type information of Puuskari into Kannas et al. to grant multiple level of resources on best effort basis to a mobile station corresponding to its multiple traffic types. The motivation is to reduce delay in packet packet transmission.

In claims 5 and 9, **Kannas et al.** discloses, in Fig.3, a user equipment 10 sends a packet data protocol (PDP) context activation request 80 requesting a first quality of service. Since the radio network 4 is congested, the user equipment 10 is assigned a second QOS (using an active PDP context procedure to support downgradable QOS requirement). When the first QOS is

available, the user equipment 10 is assigned the first QOS (support upgradable QOS requirement) See col.6, lines 10-24.

Claim 14 is rejected under 35 USC 103(a) as being unpatentable over Kannas et al. (US pat. No. 6,683,853 B1) in view of Puuskari (Pat. 6,728,208 B1), and further in view of Malmlof (US pat. No. 6,594,241B1).

In claim 14, Kannas et al. discloses a user equipment 10 (a mobile station, fig.1) requests at step 52 (fig.2) for a desired QOS resource to a serving support node SGSN 20 (a second packet server) via a radio network controller RNC18 (a first packet server). If the requested QOS resource (step 54, Fig.2) is not available, lower quality of service resource (at step 56, fig.2) is assigned. When a higher quality of service (at step 62, fig.2) is available, the request for higher QOS is upgraded (at step 68, fig.2) (performing variable QOS negotiations including downgradable QOS and upgradable QOS with the wireless data).See col.5, lines 40 to col.6, line 4. Kannas et al. does not disclose QOS negotiation including an indication for requesting multiple traffic class preferences in a priority order; a packet server comprising a transceiver and a processor.

Puuskari discloses a mobile station (MS, Fig.1) notifies its presence to the GPRS network 13 (wireless data network) (attaching the mobile station to a wireless data network, See col.7, lines 48-58). Dynamic QOS information is performed by associating priority information and traffic type information in data packet. The priority information has two values (QOS class field) defines the orders (indications for priority order). The traffic type information has two

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traffic types (multiple traffic class preferences). See col.10, lines 10-40 & & col.12, lines 35-60 & col.17, lines 9-15

Malmlof discloses, in Fig.5, a RNC 26 (a packet server) comprising a transceiver 56 (a transceiver) , a processing circuit 52 (a processor). Therefore, it would have been obvious to one ordinary skill in the art to apply the priority information indicating priority order and traffic type information of Puuskari into Kannas et al. to grant multiple level of resources on best effort basis to a mobile station corresponding to its multiple traffic types. In addition, the packet server of Kannas is modified to have a transceiver and a processor to transmit message comprising QOS information via the transceiver to the mobile station. The motivation is to reduce delay in packet packet transmission.

Response to Arguments

Applicant's arguments with respect to claims 1-9, 14 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rappaport et al. (US pat. No. 6,477,373 B1) discloses Method and Apparatus to Maintain Connectivity for Mobile terminals in Wireless and Cellular Communications Systems.

Khan et al. (US Pat. No. 6,400,954 B1) discloses Method and System for Mode Selection based on Access Network Capacity.

Sen et al. (US pat. No. 6,701,149 B1) discloses Haandoff framework to Support Real-Time Delay-Critical Services in a Next Generation Network.

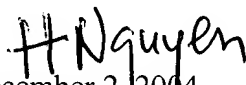
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen


December 2, 2004